

Steel Alloy Chain, Grade 100



1. Scope

This standard covers Grade 100, heat-treated, alloy steel chain.

This standard applies to the following stock numbers:

Stock No.	Size, Nominal (in)	Working Load Limit (lb)
726918	9/32	4300
726934	3/8	8800

2. Application

Steel alloy chain is used for applications such as slings and lifting assemblies. It is not appropriate for continuous motion applications.

Stock No. 726934 must be cut by the Steel Shop. Please notify the warehouse at least two hours prior.

3. Industry Standards

Steel alloy chain shall meet the requirements of the following industry standard:

ASTM A973/A973M; Standard Specification for Grade 100 Alloy Steel Chain; 2007 (reapproved 2012)

Standards Coordinator
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4. Requirements

Steel alloy chain shall conform to the requirements described in Table 4.

The diameter of the material from which the chain is manufactured shall not be smaller than the material diameter listed in Table 4 within -3% tolerance.

Table 4. Requirements for Steel Alloy Chain, Grade 100

Stock No.	Chain Size, Nominal (in)	Material Diameter (in)	Working Load Limit (lb)	Proof Test (lb)	Minimum Breaking Force (lb)	Maximum Inside Length (in)	Inside Width Range (in)
726918	9/32	0.276	4300	8600	17,200	0.9	0.375 to 0.430
726934	3/8	0.394	8800	17,600	35,200	1.26	0.512 to 0.600

5. Finish

The manufacturers applied surface treatment or finish shall not alter the chain properties so that it causes the chain to fall out of compliance with the provisions of the standard.

The chain shall be free of paint and other coatings that could mask surface anomalies.

6. Mechanical Testing

6.1 Proof Test

All chain shall be tested to the load requirements described in Table 4. When tested, the chain shall withstand the load without loss of integrity. Chain links that are not able to withstand the load requirements shall be removed from the chain.

6.2 Breaking Force Test

The test link shall be from a length of the lot that contains the least number of links. Chain shall be quenched and tempered before measuring the breaking strength. The results shall meet or exceed the minimum breaking force values detailed in ASTM A973/A973M and this standard. Elongation shall be a minimum of 20%.

7. Certification

Upon purchaser's request, manufacturer shall:

- Provide certification that the chain conforms to ordered specifications, including year of issue.
- Supply a certificate of proof test to purchaser or purchaser's representative.

8. Product Marking

Chain links shall not be marked with indented characters. Chain links shall be marked at intervals not greater than 3 ft. The marking shall include a grade indicator, manufacturer's mark or symbol, and traceability code or date code.

9. Packaging

Chain shall be packaged in a manner that prevents damage during shipping, handling and long-term storage. Units shall be marked with an SCL purchase order number and stock number.

10. Issuance

100-ft lengths

11. Approved Manufacturers

Stock No.	Size	Gunnebo Johnson	Campbell Chain and Fittings	Crosby Group
726918	9/32	KLB-7-10	0405212	273710
726934 ¹	3/8	KLB-10-10	0405412	273738

Note 1. Stock No. 726934 must be cut by the Steel Shop. Please notify the Warehouse at least 2 hours prior.

12. Sources

Tilley, Kathy; SCL Electrical Engineering Support Specialist and originator of 7273.10
(kathy.tilley@seattle.gov)

Wang, Quan; SC: Standards Engineer and subject matter expert for 7373.10
(quan.wang@seattle.gov)

www.gunnebojohnson.com/

[www.campbellchainand fittings.com/](http://www.campbellchainandfittings.com/)

www.thecrosbygroup.com/